REMARKS/ARGUMENTS

Claims 1-31, and 35- 38 are pending in the application. Claims 1-31, and 35-38 are under rejection. Claims 1-6, 9-13, 16, 18, 20-21, 23-25, 35-38 have been amended. No new matter has been added.

The office action is final. This responsive pleading is filed concurrently with a Request for Continuing Examination (RCE) so that these amended claims may be further examined.

The office action is filed after the recent filing of a new Power of Attorney to current counsel for the applicant filed with the assignment of this patent application from Vaquero Energy, Inc. to Petrolects, LLC.

1. Rejections of Claims #1,3,5,7-10,12,15-21, 24-31, and 35 as anticipated by U.S. Patent 5,006,044 to Walker

The Examiner has rejected claims 1, 3, 5, 7-10, 12, 15-21, 24-31, and 35 as anticipated by U.S. Patent 5,006,044 to Walker (hereinafter referred to as Walker). For a claim to be rejected as anticipated, each and every element of the reference must anticipate the claimed invention.

Applicant has amended independent claims 1, 11, 12, 21, 35, and 37 adding two claim limitations a "sensing element" and "flow signal data". (See this Action, Claim 1 as representative language for claims 11, 12, 21 35, and 37). "Sensing element" is supported in the specification and the drawings. (See Application, Fig 3, Element 280; Page 15, lines 1-13) and is separate and distinguishable from the flow transducer (Element 275).

These amended independent claims 1,11, 12, 21, 35, and 37, are distinguishable from Walker. Walker describes a single "clapper" element (Walker, Element 158, Figure 7-C; also Col 23, lines 19-20) connected to an analog monitoring system. This clapper element is

equivalent to the flow transducer, but, Walker does not include a "sensing element" in the check valve. As

Operationally, Walker then uses analog and discrete digital circuitry to implement a simple control cycle consisting of "rest, prime, measure, and detect". The Walker system is limited to these four control states (Walker, Figures 8 (schematic) and 9 (timing cycle), Col 28, line17 – Col 55, line 5) as implemented in the hardware. As such the optimization of pump-off is fixed and predetermined according to the hardware implementation. Walker does describe a "Z-80 based" implementation (Walker, Figure 12 misidentified as Figure 13), but then admits that the Z-80 implementation is simply a different implementation of the same analog and discrete digital circuitry described at length in the application. (Walker, Col 55, lines 6-24). Walker does not "determine an optimum pumping cycle" (Amended Claim 1) since the circuitry of Walker is fixed and cannot be programmatically altered. Furthermore, Walker does not have "a local processing system (that)...accumulates a portion of the digital flow signals in another portion of digital flow data in another portion of said first memory and transfer at least a portion to an electronic transport medium" since the Walker system is fully self contained (See Amended Claim 12). Additionally, Walker does not process "a portion" of the flow data, rather it continually processes all of the flow data, therefore making the amended claims of the application distinguishable (See Amended Claims 12, 21, 35, and 37). Applicant notes that the argument presented to the Examiner regarding the recording of "a portion" of the flow data was rejected with the statement that "an entirety is at least a portion". (Examiner's response dated August 6, 2008, Page 12). Applicant respectfully disagrees that "a portion" is equivalent to "an entirety". A portion is by definition a subset of an entirety, and thus the two terms are not equivalent.

In conclusion and summary, the Applicant argues that Walker operates as a fixed state machine cycling through the four cycles ("rest, prime, measure, and detect"). The mention of a

"Z-80" processor at the end of application does not transform Walker's machine into a flexible computer controlled processor as described in the amended independent claims. Therefore independent claims 1, 11, 12, 21, 35, and 37 are not anticipated, they are patentable for at least the same reasons, and the rejections should be withdrawn.

3b. Rejections of Claims 2-10, 13-20, 22-31, 36, and 38:

Because claims 2-10, 13-20, 22-31, 36, and 38:depend from a claim shown above not to be anticipated, they are patentable for at least the same reasons, and the rejections should be withdrawn.

4. Rejections of Claims 1-31 and 35-38 under 35 U.S.C. § 103(a) as unpatentable over U.S. Pat. No. 6,937,923 by Bassett (herein referred to Bassett) in view of U.S. Pat No. 5,006,044 by Walker Sr. and/or in view of 2002/0018399 to Schultz (herein referred to as Schultz)

4a. Rejections of Claims 1, 11, 12, 21, 35, and 37

Claims 1, 11, 12, 21, 35, and 37 are rejected on grounds that Bassett teaches a closed loop system for down hole pumping. The Bassett patent describes a down-hole submersible pump, flow sensors mounted down hole, a flow controller, and a computer system. (See Bassett Fig. 1). Bassett specifically teaches control of the flow using a variable speed drive with sensors located down hole.

Claims 1, 11, 12, 21, 35, and 37 are have been amended to include the claim limitation specific to "fluid pound" and " walking beam type pumping unit", "Fluid pound" is supported in the application on page 4, lines 1-7. Fluid pound occurs in pumping units are "sucker-rod" configurations (see Application, Page 14, line 19). "Walking beam type pumping units" are supported in the application are used to extract fluid using "sucker rod" configurations. (See Application, Figure 2; Page 14, lines 16-20). Bassett's pumping units are specifically directed

towards down-hole variable speed drive units and do not describe a "Walking beam type pumping unit").

Walker teaches a pump jack, flow sensors mounted above ground on an in-line check valve, and a processing system that does not filter data (e.g., look at a subset of the data points). (See Walker supra). Walker does not teach a "local supervisory control system" as a flexible computer controlled system. Rather Walker teaches a control system that operates in four fixed states ""rest, prime, measure, and detect" (see arguments above) to control "fluid pound". (See Walker, Col 10, line 30) in sucker rod configurations. Bassett teaches a control system that controls a "variable speed drive". (Bassett, Figure 1, Col 4, lines 4-18). Bassett does not teach a system to control the effects of fluid pound since variable speed drives would not encounter "fluid pound" situations. Likewise, Walker distinguishes submersible pumps, as described in Bassett from sucker rod pumps. (Walker, Col 3, line 35-49).

A person skilled in the art would not combine the fixed state system of Walker that is applicable to sucker-rod pumping with computer system presented for submersible pumping by Bassett. The algorithms would be fundamentally different since the conditions for "fluid pound" differ from those encountered in "down-hole" system as described by Bassett. (See Walker at Col 10, lines 15-48). Therefore there is no prima facie finding of obviousness and the rejection of claims 1, 11, 12, 21, 35, and 37 should be withdrawn.

Claims 2-10, 13-20, 22-31, 36, and 38

Claims 2-10, 13-20, 22-31, 36, and 38 are rejected on grounds that Bassett teaches the closed loop system for down hole pumping (as described above) but lacks a networked computing system. (See Schultz)

The Schultz reference teaches a down-hole monitoring system connected to a web server for geologic monitoring. The Examiner has combined the two references asserting that

the Bassett combined with Shultz would teach a person skilled in the arts how to make a pump-off control system for "fluid pound" and "sucker-rod pumps.

Both Schultz and Bassett teach systems that are not directed towards pump off control for fluid pound. Bassett (nor Schultz), as explained previously, is a controller for a system that does not address situations when "fluid pound" occurs.

Likewise, Schultz is directed towards a "well monitoring and control system" where the sensors are located in the wellbore (See Schulz, Fig 8).

The application teaches a system for pump-off control for "walking beam type pumping units".

Neither Schultz nor Bassett disclose sensors that are located in the flow discharge valve, an element that is essential to the instant application. There would be no reasonable expectation of success to combine the reference of Bassett (down-hole pump controlling for gas-lock situations) with the reference for Schultz (down hole system monitoring and controlling) to create a surface flow discharge and monitoring system. The rejection of claims 2-10, 13-20, 22-31, 36, and 38 are should be withdrawn.

Nothing herein should be deemed as a disclaimer or surrender of any rights, acquiescence in any rejection, or a waiver of any arguments that might have been raised but were not raised herein or otherwise in the prosecution of this application. Applicant reserves all rights and subject matter with respect to claims being or to be pursued in this or a related application.

CONCLUSION

Applicant submits that in view of the foregoing remarks and/or amendments, the application is in condition for allowance, and favorable action is respectfully requested.

The Commissioner is hereby authorized to charge any fees, including extension fees, or to charge any additional fees or underpayments, or to credit any overpayments, to the Credit Card account referenced on the accompanying Credit Card Payment form (PTO-2038). As an alternative, in case the Credit Card cannot be processed, the Commissioner is hereby authorized to charge any fees, additional fees, or underpayments, or to credit any overpayments, to Deposit Account No. 50-1001.

Respectfully submitted,

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